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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, ANTHONY H

ART UNIT PAPER NUMBER

2854

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/820,984

Applicant(s)

BAETEN, MICHAEL

Examiner

Anthony H. Nguyen

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 U.S.C. § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Marcheggiani (US 5,944,956).

With respect to claims 1, 6 and 7, Marcheggiani teaches an apparatus for cleaning the surface 30 of a rotating cylinder 20 having a nozzle 54 which includes a orifice 56 which directs the pressured fluid at an acute angle toward the cylinder surface and a cleaning head 66 having a suction port 74 downstream of the nozzle in the direction of rotation of the cylinder as shown in Figs.1 and 2 of Marcheggiani. With respect to claim 2, Marcheggiani teaches the nozzle 54 which is mounted on the cleaning head 66 as shown in Fig.1. With respect to claims 3-5, Fig.2 of Marcheggiani shows the angle 60 of the nozzle 54 and the tangential line 62 which is in the range 0 - 180° ( Marcheggiani, col.3 lines 51-54).

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 10-13 and 16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Marcheggiani (US 5,944,956).

Marcheggiani teaches all that is claimed, except the nozzle which includes a fluid cap and an air cap mounted on the fluid cap. However, the use of a nozzle having an air cap mounted on a fluid cap so as to provide a mixture of air and liquid is conventional. It would have been obvious to one of ordinary skill in the art to modify the nozzle of Marcheggiani by providing the conventional use of nozzle having air cap mounted on a fluid cap to improve the efficiency of spraying a mixture of liquid on the surface of a cylinder for cleaning. With respect to claim 11-13, the selection of a desired internal diameter of the air cap or the orifice, and the selection of the water flow rate which is varied with the speed of rotation of the would be obvious through routine experimentation in order to get best possible cleaning effects.

Claim 17 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Marcheggiani (US 5,944,956) in view of Ben-Zion et al. (US 6,371,026).

Marcheggiani teaches all that is claimed, except the cleaning head which includes the suction port located in a curve surface nozzle. Ben-Zion et al. teaches a cleaning head 50 which includes a suction port located in a curve surface 94 as shown in Figs.2 and 3A of Ben-Zion et al. In view of the teaching of Ben-Zion et al., it would have been obvious to one of ordinary skill in the art to modify the cleaning apparatus of Marcheggiani by substituting the cleaning head as taught by Ben-Zion et al. for optimum cleaning effects on the surface of a cylinder in place of the cleaning head 66 of Marcheggiani.

*Allowable Subject Matter*

Claims 8, 14 and 15 are allowed.

*Response to Arguments*

Applicants' arguments filed on May 27, 2005 have been fully considered but they are not persuasive of any error in the above rejections.

Applicant argues that Marcheggiani does not teach the roll which rotates in reverse direction in which the nozzle directs the fluid toward the cylindrical surface.

However, Marcheggiani meets the structure as broadly recited in claim 1 since the claim does not require the direction as argued by applicant. Clearly, Marcheggiani teaches the cleaning head downstream of the nozzle in the direction of rotation of the cylinder and including a suction port adjacent to the cylinder surface. Note that the negative pressure of the suction port 74 should be included the housing or the receptacle 68 otherwise the device does not operate.

Applicant argues that Marcheggiani does not teach the suction port which has a longitudinal axis forming an acute angle with a tangent to the cylinder surface as required by claim 7.

It is noted that the tangent line can be at any point on the surface of the cylindrical surface. Therefore, as explained above, the suction port of Marcheggiani should be included the housing 68 which forms an acute angle with a tangent to the cylindrical surface as shown in Figs. 1, 4 and 5.

Applicant argues that there is no teaching or suggestion to use the nozzle which includes a fluid cap and an air cap, but applicant admits that the nozzles having a fluid cap and an air cap are in the prior art.

As explained above, one of ordinary skill in the art would have been well aware of the conventional use of nozzles which include a fluid cap and an air cap and would have found their use in Marcheggiani to have been obvious. Note that claims 10-13 and 16 are rejected under 35 USC 103 which is based upon a single reference rather than the more common situation where a secondary reference is used to modify a primary or base reference. Therefore, there is modification of a base reference by a secondary reference to explain. A 103 rejection on a single reference is an acknowledgement that the claim is not "fully met" as this language is strictly interpreted under 35 USC 102, with an argument that the minor differences are obvious -such as the use of the conventional use of the nozzles having an air cap and a fluid cap.

Applicant argues that Marcheggiani does not teach the structure as recited in claims 11-13.

However, structure as recited in the claims directs to the structure of the air cap which is used in the prior art as admitted by applicant. that applicant admits the air cap are in the prior art.

Applicant argues that Marcheggiani does not teach the structure as recited in claim 16 which includes a water tube and a water flow meter for varying the flow rate to the nozzle.

This argument, however, fails to recognize that a prior art reference must be "considered together with the knowledge of one of ordinary skill in the pertinent art." *In re Samour*, 571 F.2d 559, 562, 197 USPQ 1, 3-4 (CCPA 1978); *See also DeGeorge*, 768 F.2 at 1323, 226 USPQ at 762 (Fed. Cir. 1985) (a reference "need not , however, explain every detail since {it} is speaking

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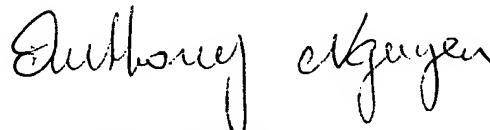
to those skilled in the art". As stated in Marcheggiani, the flow rate can be varied at any speed within the range with known technology. For example, Fig.1 of Marcheggiani shows the flow rate can be varied via a flow control valves or a flow meter 55 and 57 via a tube 59.

***Conclusion***

Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168. The fax phone number for this Group is (571) 273-8300.



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7/14/05  
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